

**REMARKS****I. Status Of The Claims**

Claims 1-29 were originally filed. Claims 18, and 21 are amended by the current amendment and new Claims 30 –33 are added. Accordingly, claims 1-33 are presently pending and under consideration.

**II. The Incorporation of Subject Matter By Reference Is Not Improper**

The Office Action objects to the attempt to incorporate subject matter into the application by reference to US Patent Application entitled “Article Irradiation System With Multiple Beam Paths.” The specification is amended with the pertinent information regarding this reference.

**III. The Amended Claim Is Not Improper**

The Office Action objects to claim 21 as being of improper dependent form as it erroneously depends upon claim 198. The claim is amended so that it depends on claim 19. Accordingly, this objection is obviated.

**IV. The Claims Are Not Anticipated**

The Office Action rejects Claims 1, 2, 5-8, 11-18 and 24-29 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,051,185 (Beers). With regard to Claims 1, 2, 5-8, and 11-18, Beers does not disclose both an inner shield and an outer shield disposed around the inner shield and at least part of the conveyor system. Beers discloses a system designed to operate with a gamma irradiator. Beers, therefore discloses a system with one shield only, which defines the cell area. The cell area houses the irradiation source and the totes are moved directly into the cell area to be irradiated. The instant invention discloses a system with two shields. One shield, the inner shield, is disposed around the radiation source. The second shield, the outer shield, is disposed around the inner shield and at least part of the conveyor system. As can be seen from the figures, the two shields create a pathway for part of the conveyor system in which the radiation is attenuated when articles are passed by the beam path. Beers does not disclose two shields as it utilizes a different source of radiation and does not possess a beam path.

With reference to Claims 5-8 and 11-18, as stated above Beers does not disclose an outer shield and an inner shield. Beers discloses one shield only (biological shield 114), which surrounds the cell area (106). The only removable, non-welded component of the biological shield (114) of Beers is the shielding door (104) which is controlled by door movement mechanism (320) to allow totes to be moved into and out of the cell area. Claim 18 is amended to further clarify the inventive features. The inner and outer shields are constructed of removable modules that can be bolted together to form the shielding. Beers discloses shielding that is welded together and therefore not easily removed or rearranged. The present invention is directed toward modular shielding that can be easily installed and removed.

With reference to claims 8, 11 and 12, Beers does not disclose a port in the module for allowing ballast material to pass out of the module. Beers discloses modules that are welded together and therefore the components of the modules are not easily manipulated. Beers does disclose that a steel panel (214) in the ceiling can be removed to allow inspection of the level of the ballast. However, it would be very difficult to remove ballast material from a panel through the ceiling. Beers also does not disclose removable ceiling plug for allowing access to the radiation source. The radiation source of the present invention is housed inside the inner shield. The radiation source of Beers, has a specific mechanism to move the radiation source into and out of the cell area. Col. 8, line2 26-29. Therefore, Beers does not disclose this feature.

With reference to claims 24-29, Beers does not disclose the method of removing a radiation source or disconnecting the modular shields. As mentioned above, the source in Beers is moved into and out of the cell area by a specific mechanism. Additionally, the shield in Beers is comprised of four modular walls that are welded together. Therefore, they are not capable of being disconnected.

Finally, with reference to claims 2-29, these claims all disclose an irradiation system with an upper and lower level. Beers discloses a system with one level only.

**V. The Claims Are Not Obvious**

The Office Action rejects Claims 3, 4, 9, 10 and 19-23 under 35 U.S.C. § 103(a) as being unpatentable over Beers in view of Allen et al U.S. Patent No. 6,529,577 (Allen). For the reasons stated above, Beers does not disclose the features of the claims from which these claims

depend. In addition all of the rejected claims require a two level irradiation system. Both of the cited references disclose single level systems. Therefore Beers cannot be combined with Allen to make the two level system of the claimed invention obvious.

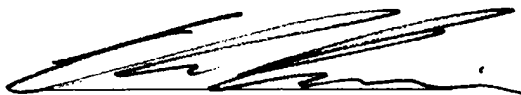
**CONCLUSION**

In view of the amendments and remarks set forth above, it is respectfully submitted that this application is in condition for allowance. Accordingly, a Notice of Allowance is earnestly solicited. If the Examiner has any questions, or believes that a personal or telephonic interview will expedite prosecution, the Examiner is encouraged to contact the undersigned attorney at any time.

Respectfully submitted,

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Date



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